

Chapter – 15 | Body Fluids and Circulation**QUIZ
PART-06**

1. The series of events from one heartbeat to the next is called:
- A. Stroke volume B. Cardiac cycle
C. Cardiac output D. Blood pressure (B)

Explanation : One complete heartbeat, from the beginning of one beat to the next, is called the cardiac cycle.

2. At the beginning of the cardiac cycle, all four chambers are in:
- A. Joint diastole
B. Ventricular systole
C. Atrial systole
D. Complete contraction (A)

Explanation : Initially, all four chambers are relaxed, which is called joint diastole.

3. During joint diastole, which valves are open?
- A. Semilunar valves
B. Tricuspid and bicuspid valves
C. Aortic valves only
D. Pulmonary valves only (B)

Explanation : In joint diastole, tricuspid and bicuspid valves are open, allowing blood to enter ventricles.

4. Atrial contraction increases ventricular filling by about:
- A. 10% B. 20%
C. 30% D. 50% (C)

Explanation : Atrial contraction pushes extra blood into ventricles, increasing ventricular filling by about 30%.

5. The action potential reaches ventricles through:
- A. SAN → AVN → AV bundle → Purkinje fibres
B. AVN → SAN → Aorta → Veins
C. SAN → Pulmonary vein → Aorta
D. Purkinje fibres → SAN → AVN (A)

Explanation : The impulse travels from SAN to AVN, then AV bundle, and finally through Purkinje fibres.

6. Duration of one cardiac cycle is about:
- A. 0.2 seconds
B. 0.4 seconds
C. 0.8 seconds
D. 1.5 seconds (C)

Explanation : At 72 heartbeats per minute, one cardiac cycle takes about 0.8 seconds.

7. Stroke volume is approximately:
- A. 30 ml
B. 50 ml
C. 70 ml
D. 100 ml (C)

Explanation : Each ventricle pumps about 70 ml of blood in one cardiac cycle.

8. First heart sound "Lub" is produced by closure of:
- A. Semilunar valves
B. Tricuspid and bicuspid valves
C. Pulmonary veins
D. Aorta only (B)

Explanation : "Lub" sound occurs due to closure of tricuspid and bicuspid valves.

9. In ECG, P wave represents:
- A. Ventricular relaxation
B. Atrial depolarization
C. Ventricular depolarization
D. End of systole (B)

Explanation : P wave shows atrial depolarization, which causes atrial contraction.

10. In ECG, QRS complex represents:
- A. Atrial relaxation
B. Atrial contraction
C. Ventricular depolarization
D. Ventricular relaxation (C)

Explanation : QRS complex represents ventricular depolarization, which triggers ventricular contraction.